

H<sub>2</sub>N-SDDPKESEGLHCVCVKTSIVPRHITNLELIKAGGHPTANL IATKNGRKLCLDQALMKKIKKKLES-COOH

**Cationic** **Cationic**

ALYKKFKKLLKSLKRLG

005280-9T834960

FIG. 2A

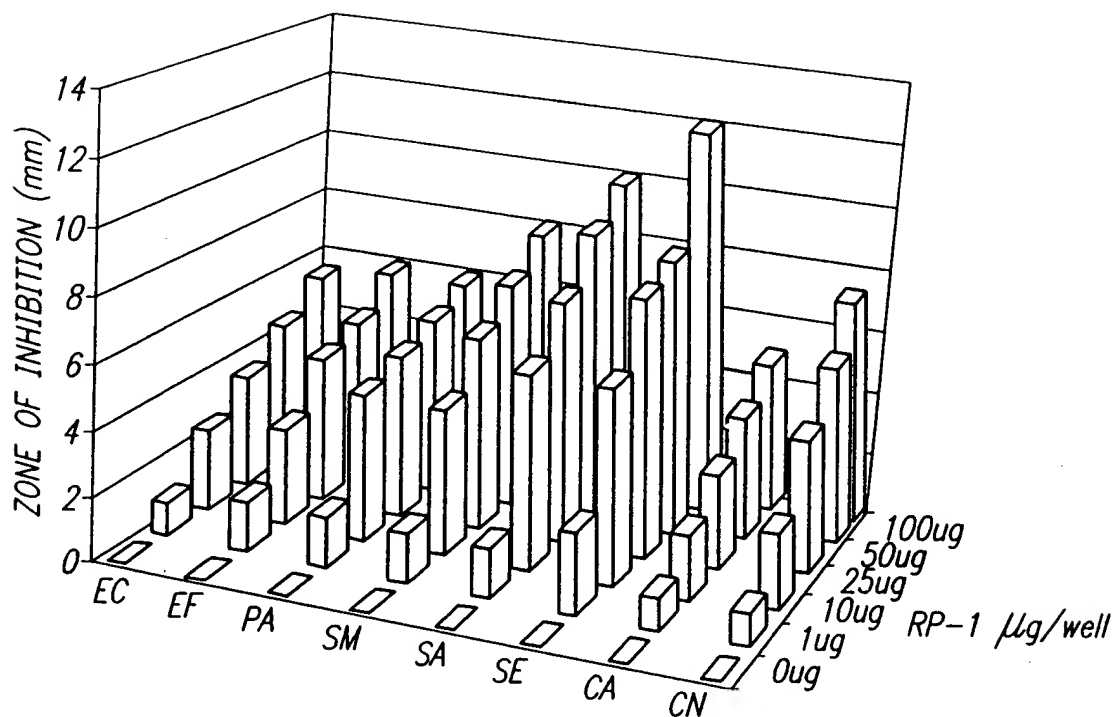


FIG. 2B

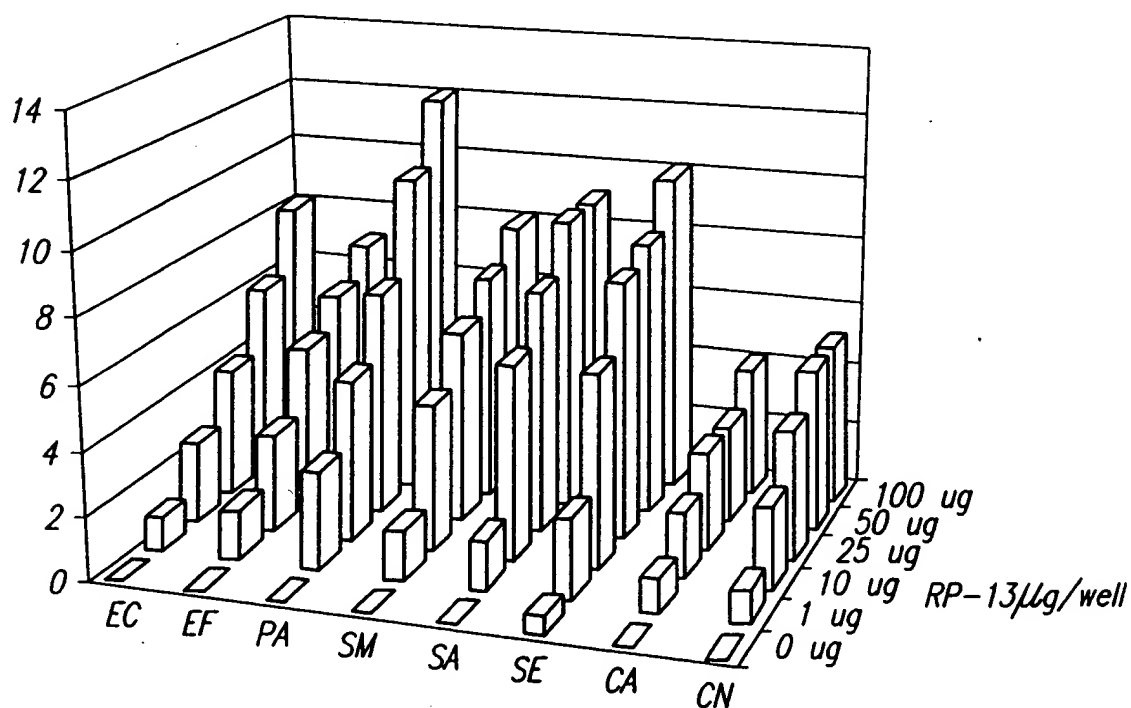
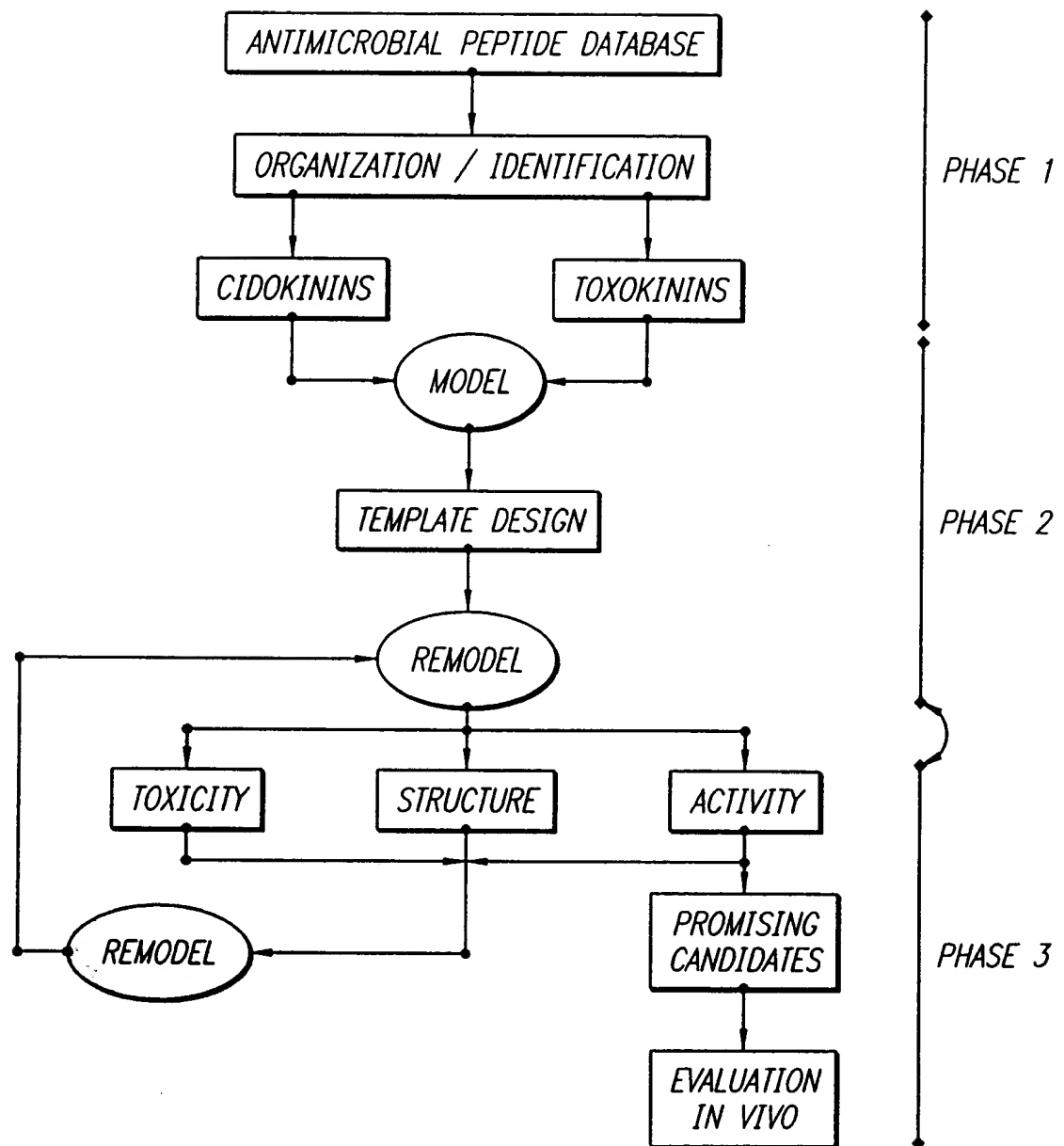


FIG. 3



005280" 9T84950

005280" 9T884960

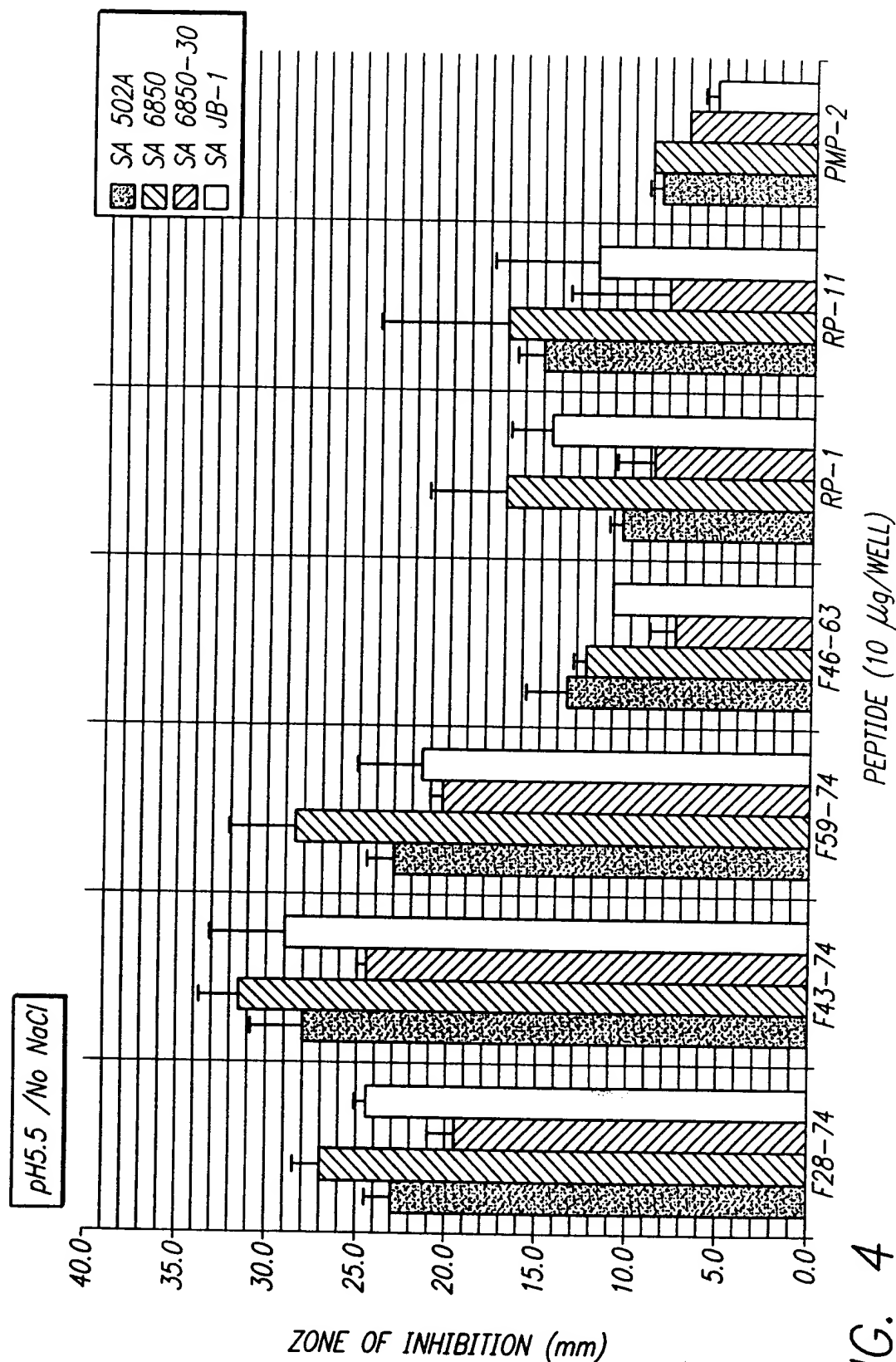
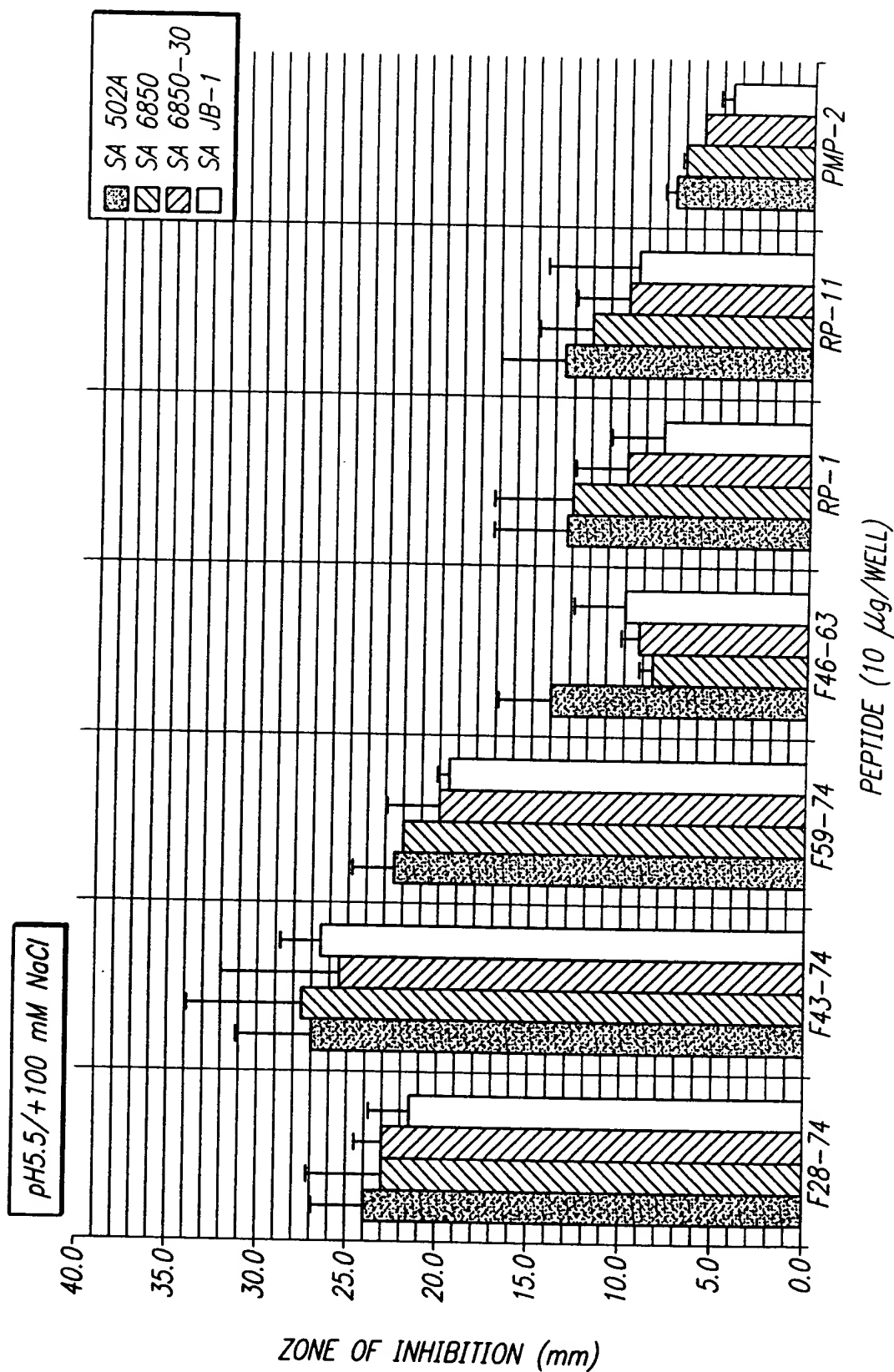


FIG. 5



005280" 97884960

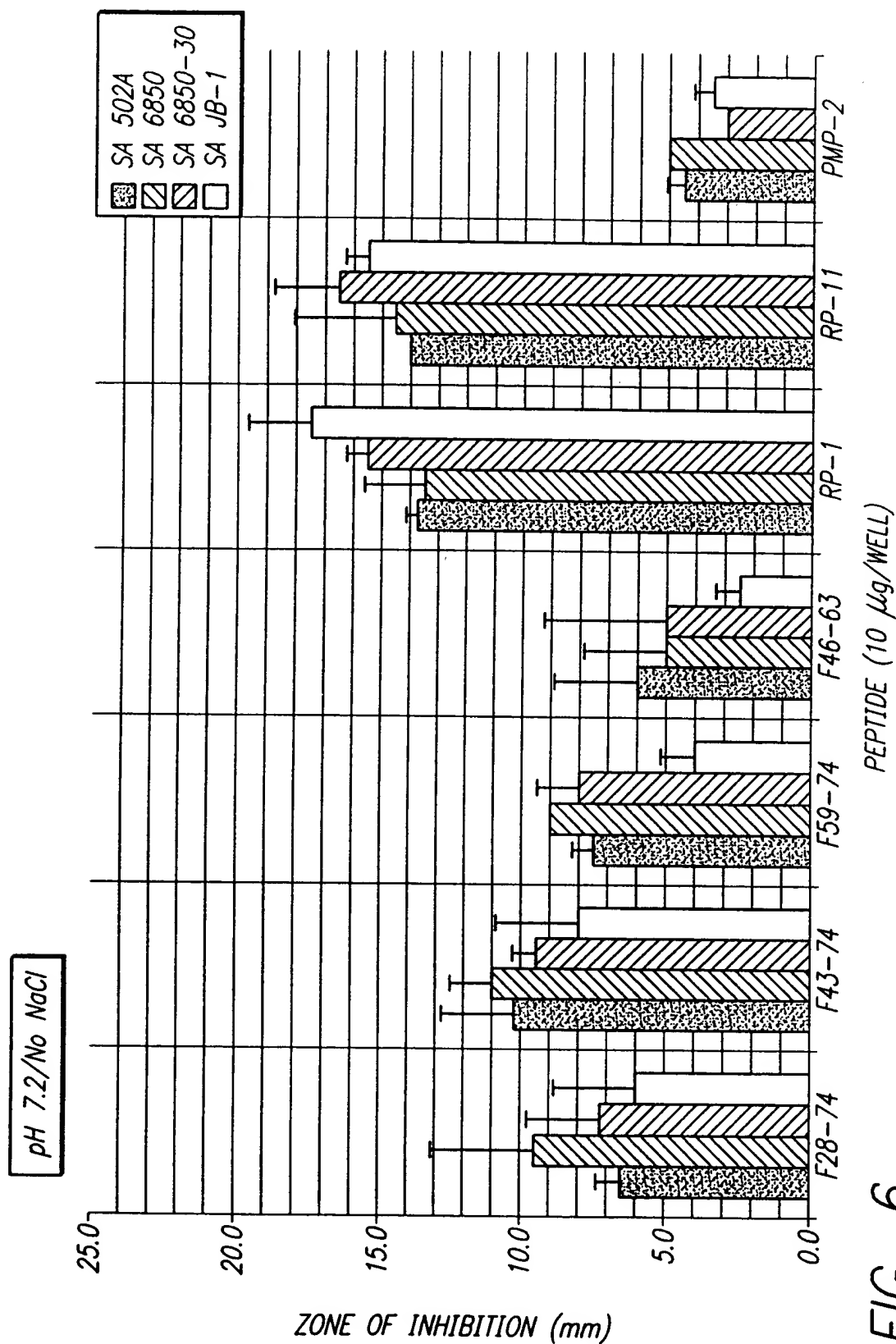


FIG. 6

FIG. 7

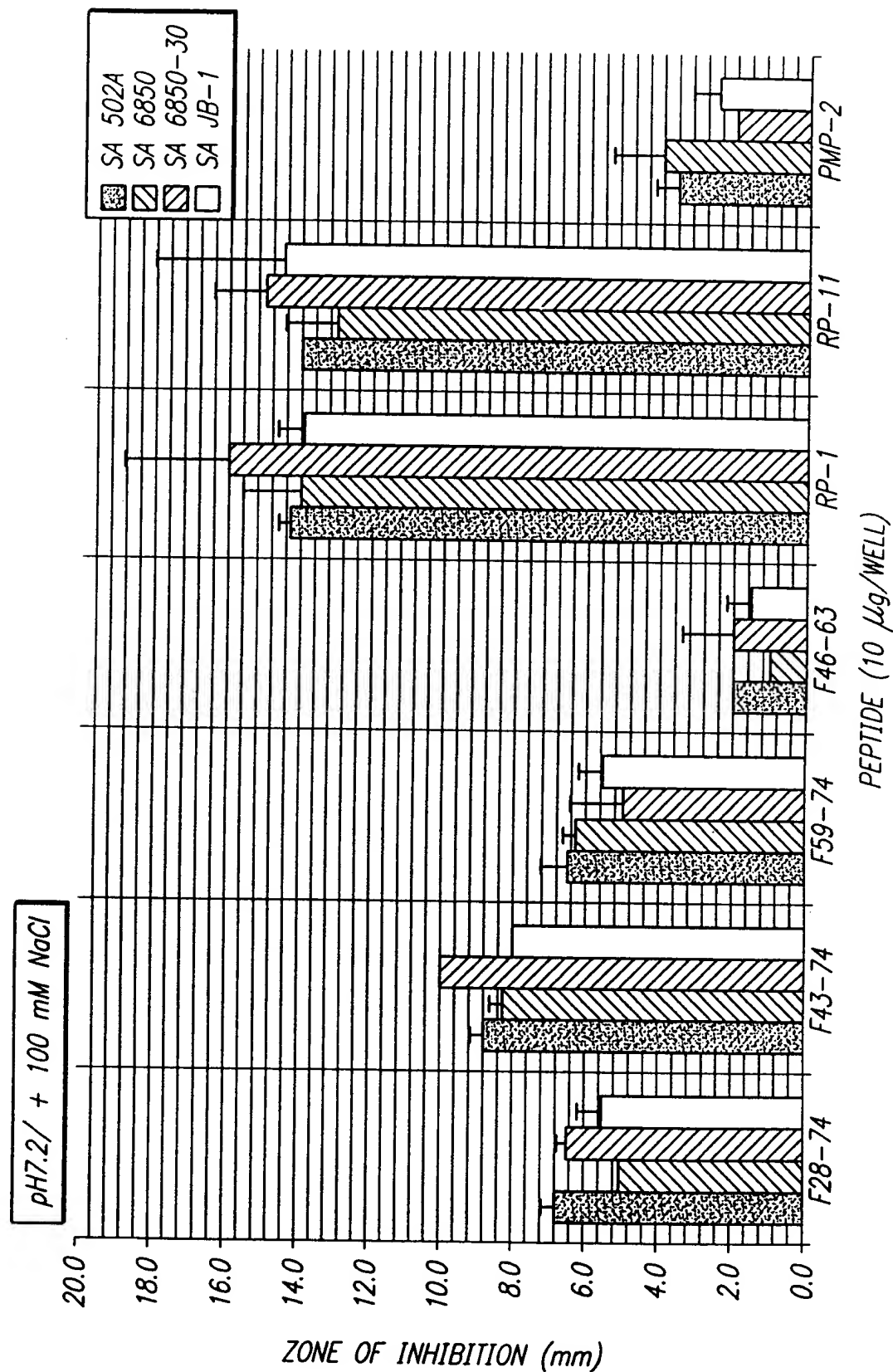


FIG. 8

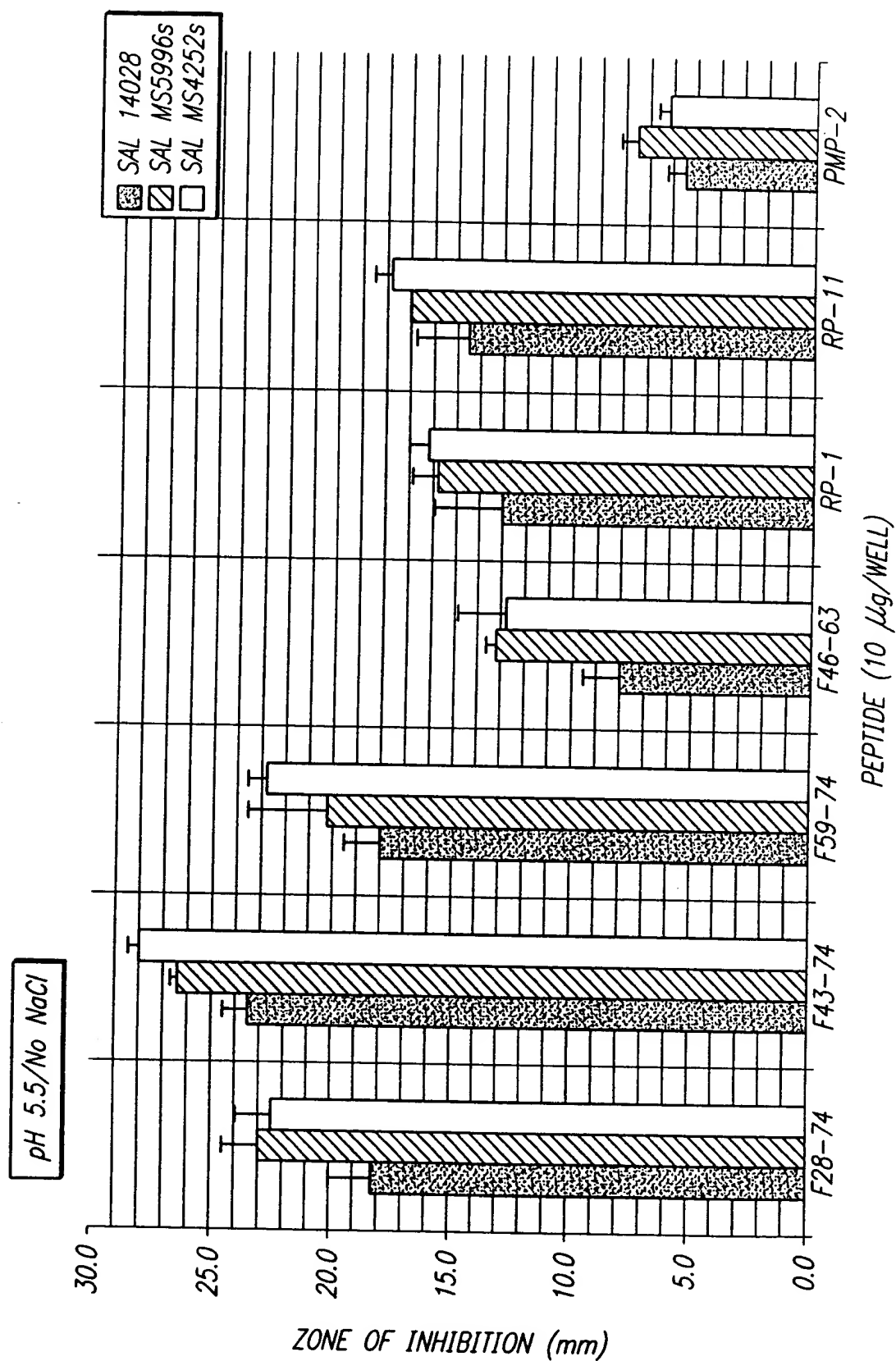




FIG. 9

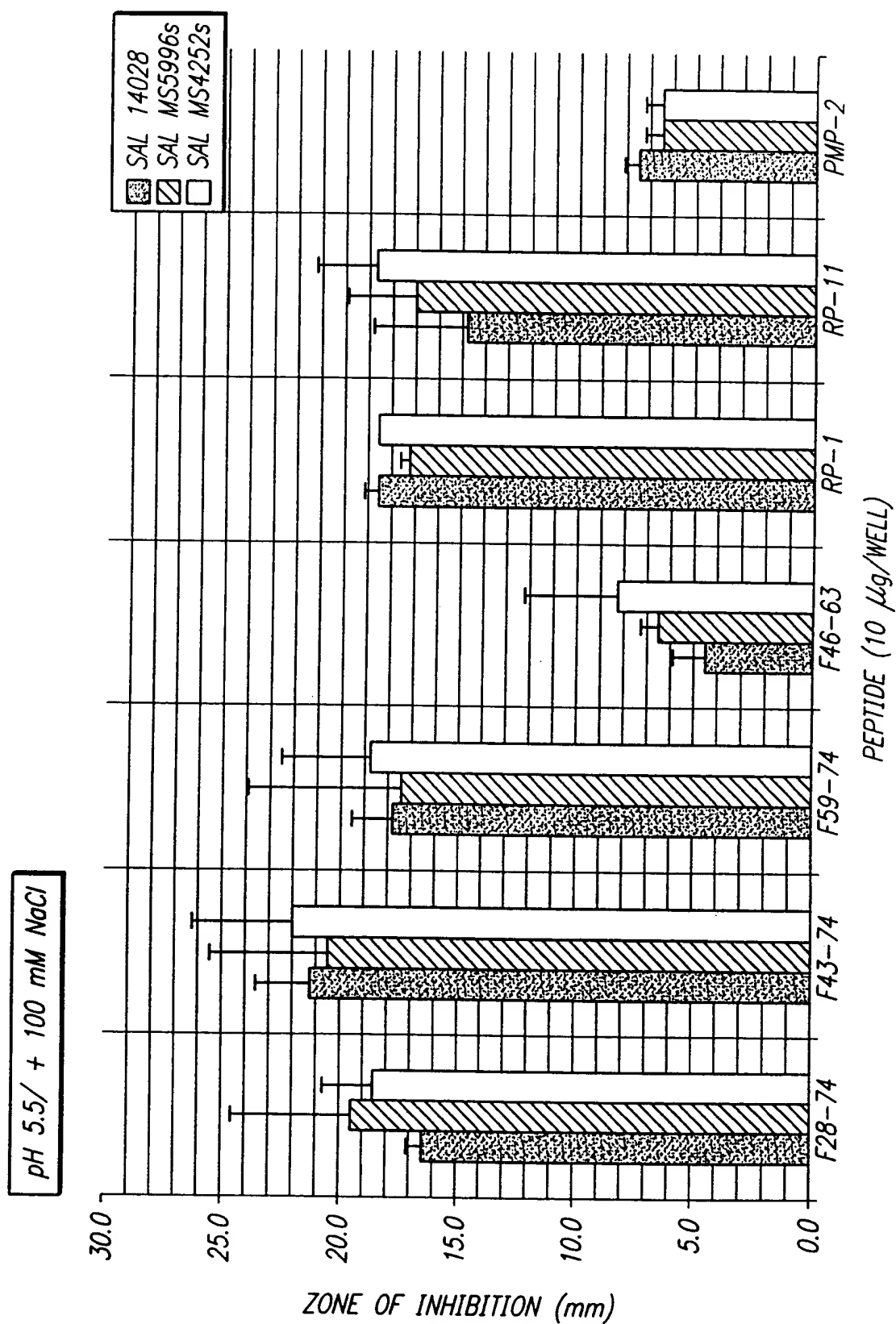


FIG. 10

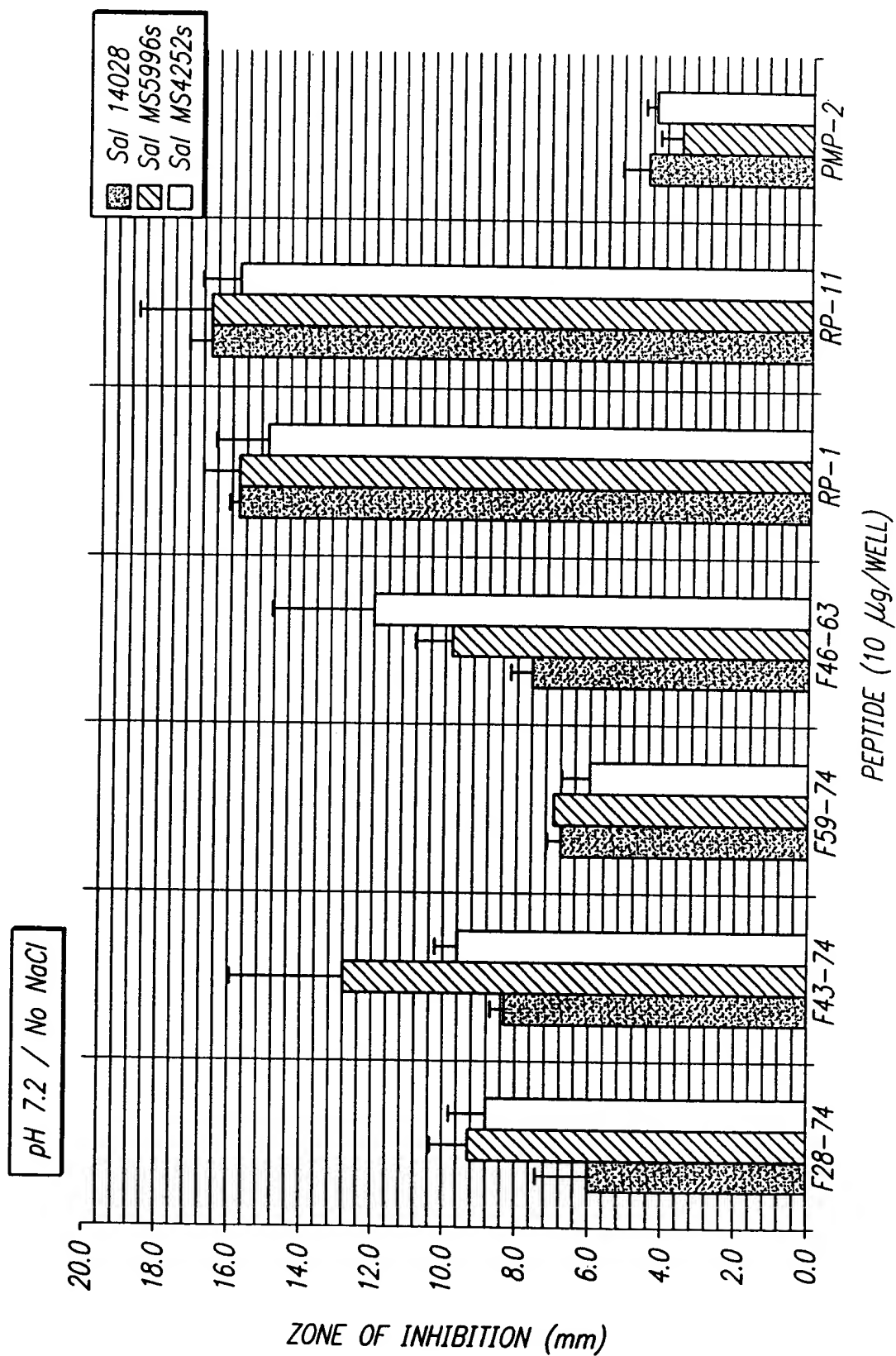


FIG. 11

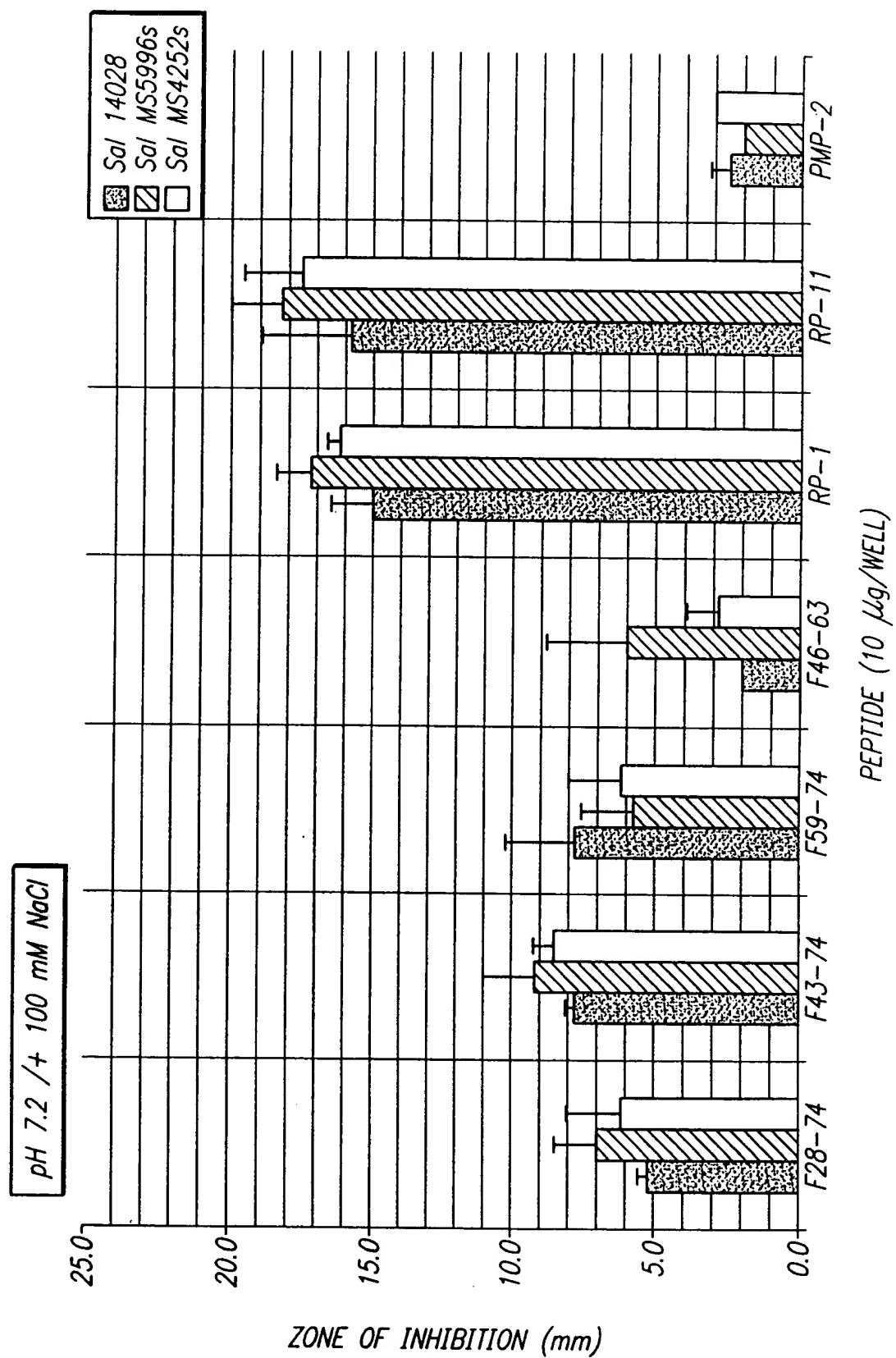




FIG. 13

	PBS	N-f-MLF	rPF-4	rPMP-2	PMP-2(46-63)	RP-1
MEAN	1.1	2.6	2.2	2.3	1.4	1.5
S.D.	0.3	0.6	0.2	0.3	0.2	0.4

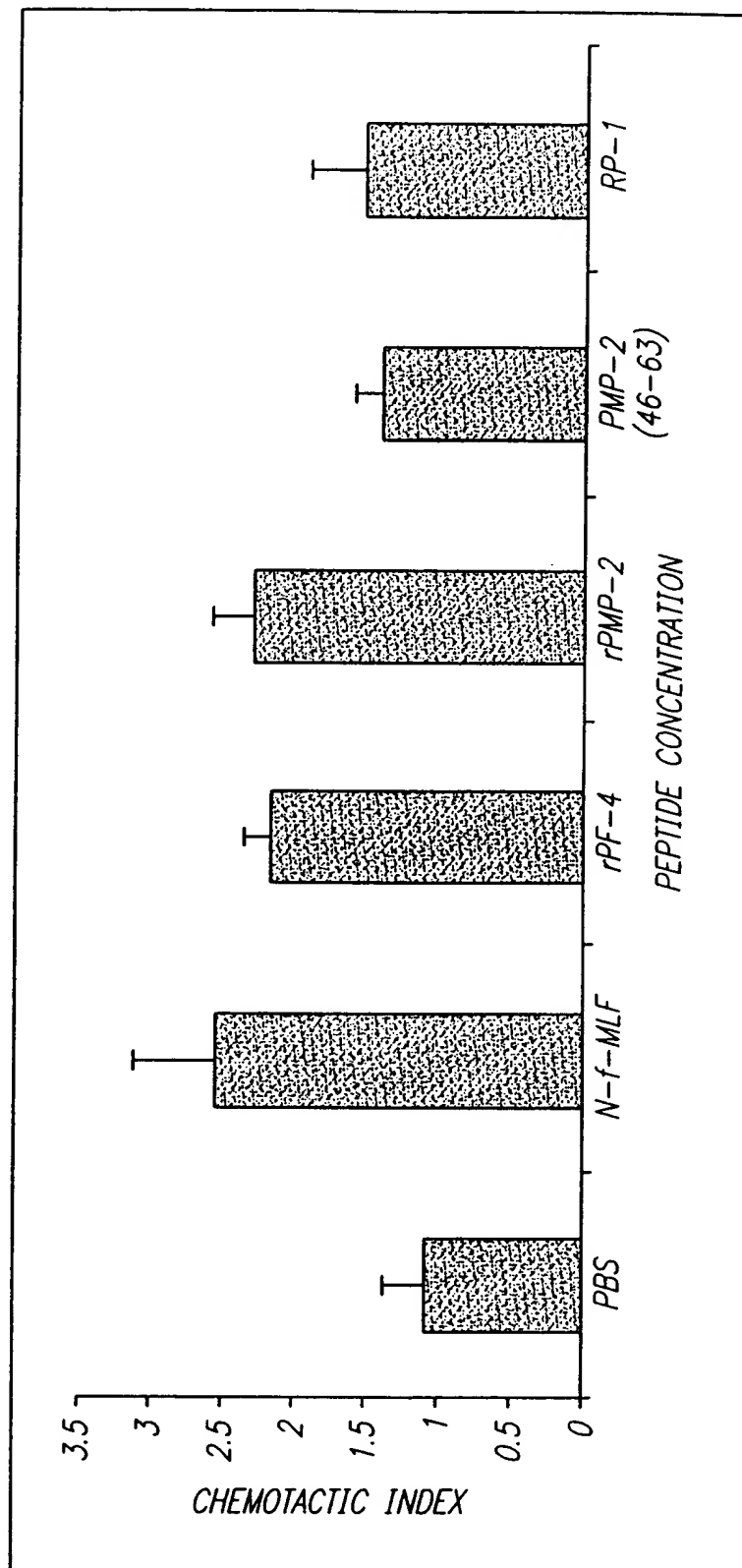
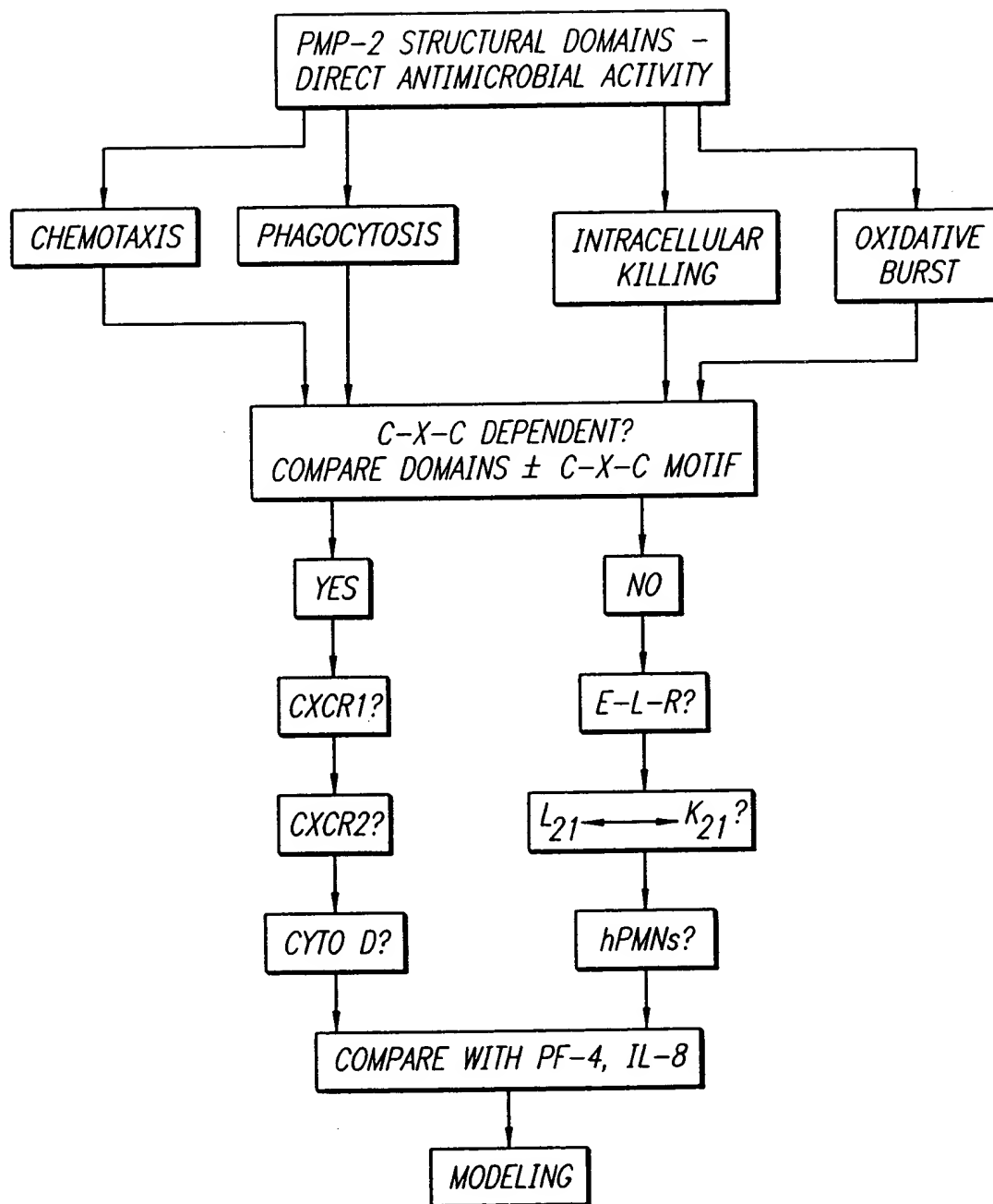
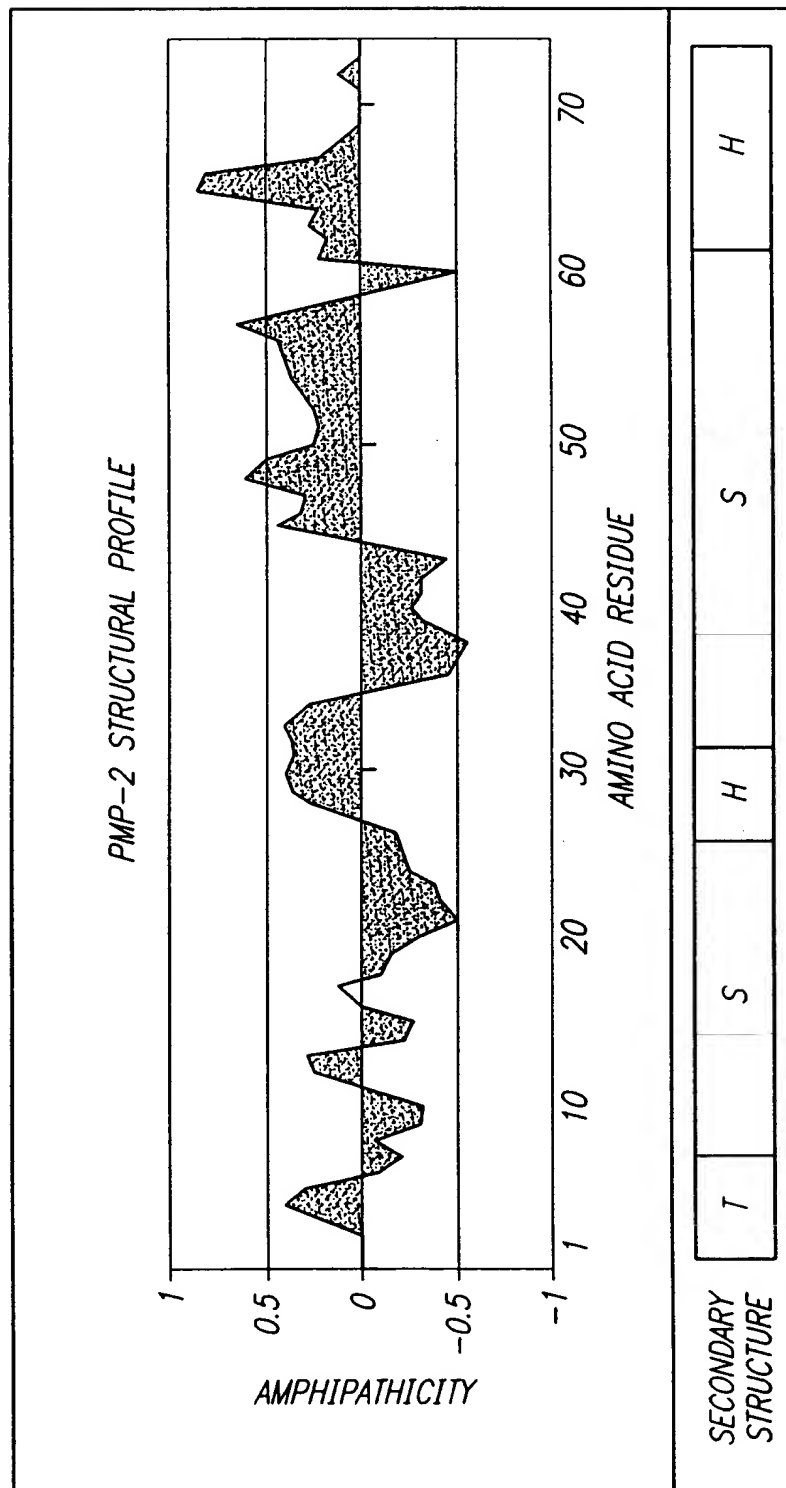


FIG. 14



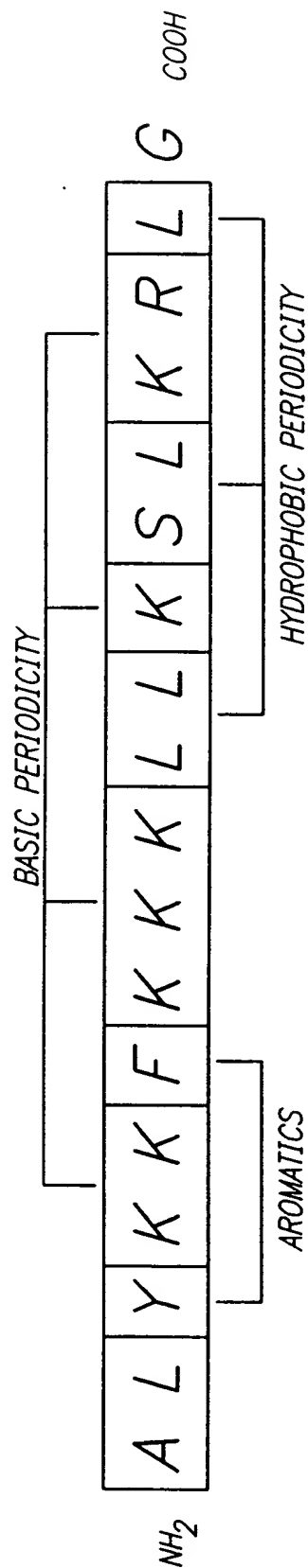
005280 9T834960 09648816 082500

005280" 9T884960



*FIG. 15*

FIG. 16





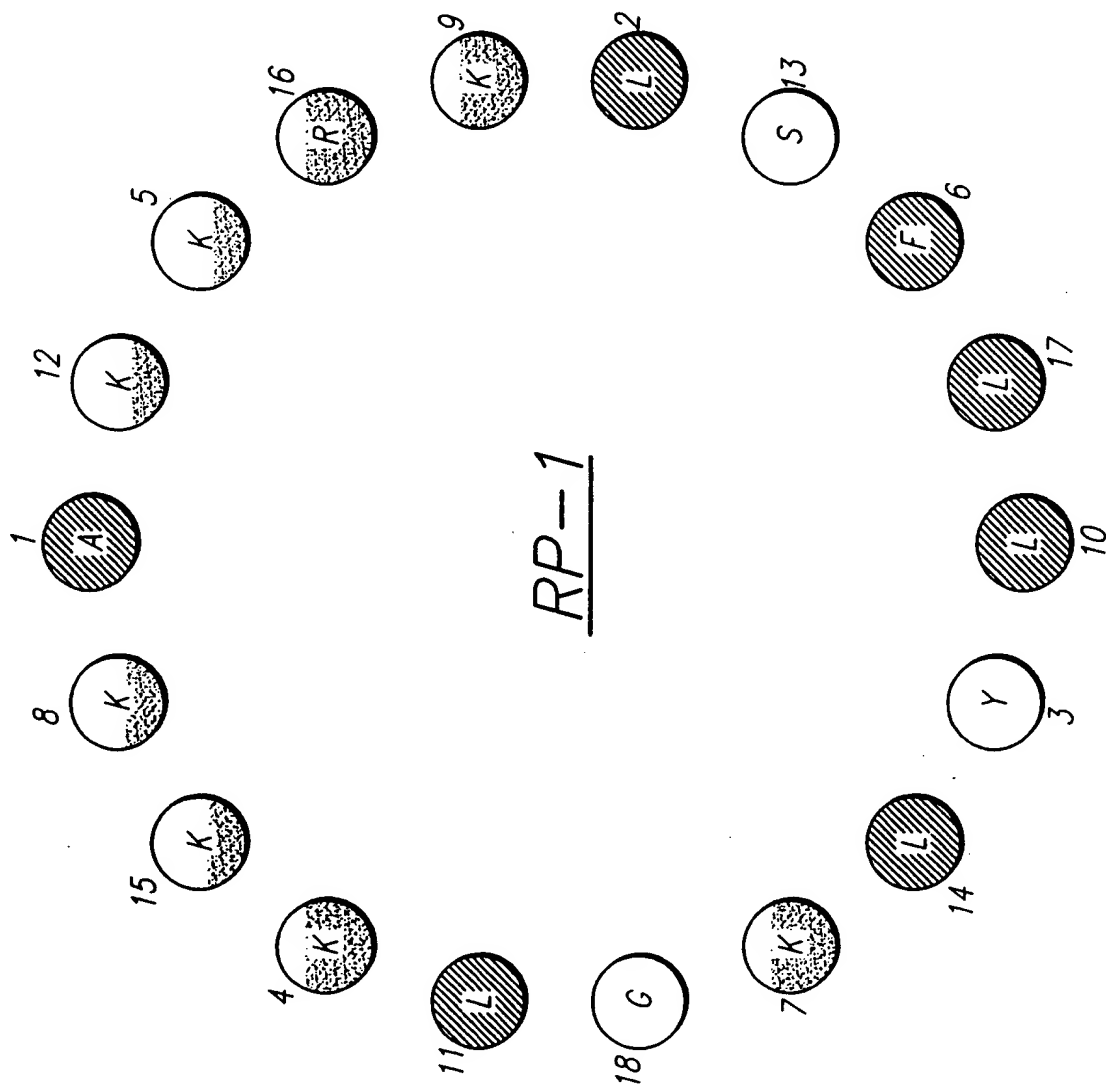
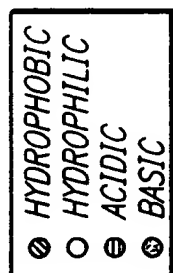
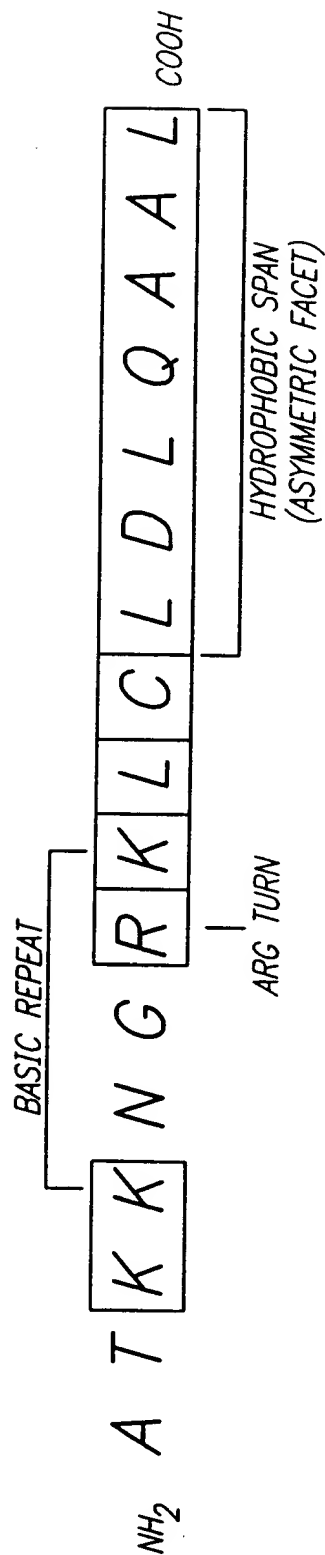
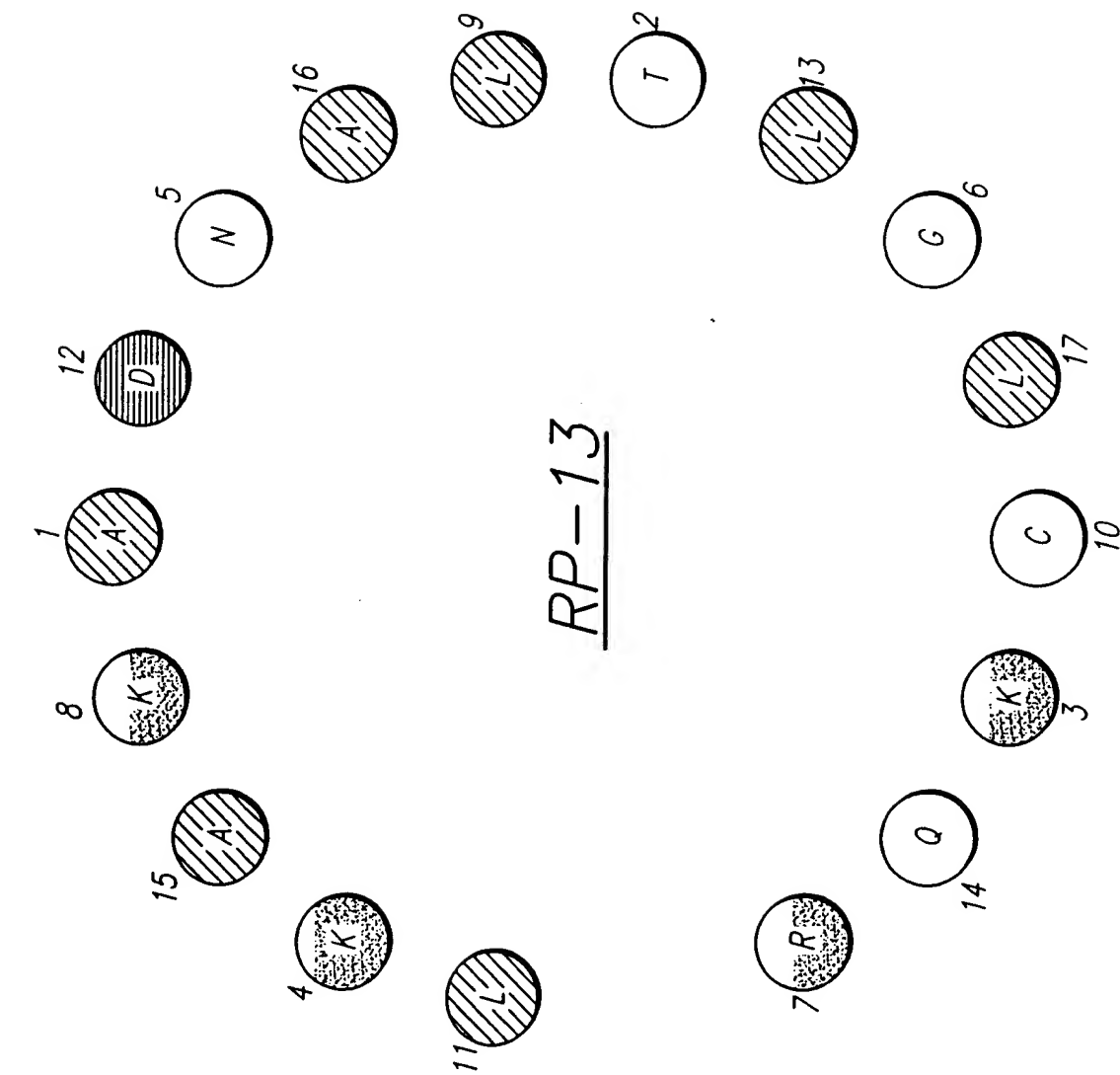


FIG. 17

FIG. 18





⊗	HYDROPHOBIC
○	HYDROPHILIC
⊖	ACIDIC
⊕	BASIC

FIG. 19

GEOMETRIC MEAN MIC<sub>100</sub>

	NUTRIENT BROTH				MUELLER-HINTON BROTH			
	pH 5.5		pH 7.2		pH 5.5		pH 7.2	
PATHOGEN	50%	100%	50%	100%	50%	100%	50%	100%
SA	70.7	100	3.1	3.1	100	>100	6.3	25
SE	6.3	8.8	1.6	3.1	1.6	3.1	25	25
EF	50	>100	25	50	>100	>100	25	35
SM	35.4	35.4	1.6	3.1	6.1	25	6.3	6.3
EC	25	25	12.5	12.5	12.5	25	12.5	12.5
PA	8.8	12.5	6.3	6.3	3.1	25	12.5	0.8
CA	17.7	35.4	6.3	12.5	>100	100	25	25
CN	12.5	25	1.6	1.6	>100	1.6	3.1	6.3

ORGANISM INOCULUM =  $1 \times 10^5$  CFU/ml; LOGARITHMIC-PHASE CELLS  
 PEPTIDE CONCENTRATION = 10  $\mu$ g/ml; (4.6 nmoles / ml ; 4.6  $\mu$ M)  
 INCUBATION 37°C, AMBIENT CO<sub>2</sub>; MIC<sub>100</sub> READ AT 24HR (n  $\geq$  2)

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FIG. 20

GEOMETRIC MEAN MIC<sub>100</sub>

	NUTRIENT BROTH			MUELLER-HINTON BROTH		
	pH 5.5		pH 7.2	pH 5.5		pH 7.2
	50%	100%		50%	100%	
PATHOGEN						
SA	1.6	8.8	6.3	25	100	>100
SE	3.1	3.1	3.1	3.1	3.1	>100
EF	6.3	6.3	12.5	25	100	>100
SM	3.1	1.6	3.1	12.5	50	>100
EC	12.5	25	6.3	100	>100	25
PA	4.4	8.8	6.3	50	100	100
CA	6.3	8.8	6.3	25	100	50
CN	1.6	1.6	2.2	3.1	1.6	3.1

ORGANISM INOCULUM =  $1 \times 10^5$  CFU/ml; LOGARITHMIC-PHASE CELLS  
 PEPTIDE CONCENTRATION = 10  $\mu$ g/ml; (4.3 nmoles / ml ; 4.3  $\mu$ M)  
 INCUBATION 37°C, AMBIENT CO<sub>2</sub>; MIC<sub>100</sub> READ AT 24HR ( $n \geq 2$ )

GEOMETRIC MEAN MIC<sub>100</sub>

	NUTRIENT BROTH			MUELLER-HINTON BROTH		
	pH 5.5		pH 7.2	pH 5.5		pH 7.2
	50%	100%		50%	100%	
PATHOGEN						
SA	1.6	6.3	3.1	50	100	>100
SE	1.6	1.6	1.6	3.1	3.1	>100
EF	2.2	3.1	17.7	50	100	>100
SM	0.2	0.4	1.6	25	50	6.3
EC	6.3	8.8	3.1	100	>100	25
PA	1.6	3.1	3.1	12.5	100	>100
CA	4.4	4.4	3.1	25	50	12.5
CN	2.2	0.78	1.6	1.6	3.1	3.1

ORGANISM INOCULUM =  $1 \times 10^5$  CFU/ml; LOGARITHMIC-PHASE CELLS  
 PEPTIDE CONCENTRATION = 10  $\mu$ g/ml; (5.9 nmoles / ml ; 5.9  $\mu$ M)  
 INCUBATION 37°C, AMBIENT CO<sub>2</sub>; MIC<sub>100</sub> READ AT 24HR ( $n \geq 2$ )

GEOMETRIC MEAN MIC<sub>100</sub>

PATHOGEN	NUTRIENT BROTH			MUELLER-HINTON BROTH		
	pH 5.5		pH 7.2	pH 5.5		pH 7.2
	50%	100%		50%	100%	
SA	19.8	25	>100	100	>100	>100
SE	5	6.3	>100	100	6.25	>100
EF	12.5	25	>100	100	100	>100
SM	6.3	19.8	>100	50	100	>100
EC	12.5	25	>100	50	>100	100
PA	9.9	19.8	>100	50	100	>100
CA	25	39.7	12.5	>100	>100	>100
CN	12.5	12.5	12.5	25	100	>100

ORGANISM INOCULUM =  $1 \times 10^5$  CFU/ml; LOGARITHMIC-PHASE CELLS  
 PEPTIDE CONCENTRATION = 10  $\mu$ g/ml; (5.4 nmoles / ml ; 5.4  $\mu$ M)  
 INCUBATION 37°C, AMBIENT CO<sub>2</sub>; MIC<sub>100</sub> READ AT 24HR ( $n \geq 2$ )

PEPTIDE	ANTIMICROBIAL ACTIVITY †										TOXICITY ‡	
	SA	SE	EF	SM	EC	PA	CA	CN	RBC <sub>Hg</sub>	HUVEC		
RP-1	3.1	3.1	25	3.1	12.5	6.3	12.5	6.3	>98%	<5%		
RP-2	6.3	6.3	25	1.6	100	25	>100	12.5	95%	5%		
RP-3	3.1	3.1	50	1.6	6.3	25	12.5	1.6	95%	5%		
RP-4	12.5	4.4	50	4.4	>100	50	12.5	3.1	97%	7%		
RP-5	8.8	3.1	50	4.4	100	25	17.7	4.4	95%	6%		
RP-7	70.7	12.5	50	25	100	>100	50	25	85%	12%		
RP-8	6.3	3.1	25	3.1	12.5	12.5	6.3	1.6	90%	7%		
RP-11	6.3	1.6	35.4	2.2	6.3	6.3	4.4	3.1	87%	8%		
RP-13	>100	>100	>100	>100	>100	>100	>100	>100	94%	5%		

ORGANISM INOCULUM =  $1 \times 10^5$  CFU/ml; LOGARITHMIC-PHASE CELLS

PEPTIDE CONCENTRATION = 10  $\mu$ g/ml; 37°C, AMBIENT CO<sub>2</sub>; 24 OR 48HR

† GEOMETRIC MEANS OF MIC<sub>100</sub> ( $n \geq 2$ ); ‡ IN VITRO TOXICITY MARKERS



PEPTIDE	ANTIMICROBIAL ACTIVITY †										TOXICITY ‡	
	SA	SE	EF	SM	EC	PA	CA	CN	RBC <sub>Hg</sub>	HUVEC		
RP-1	70.7	6.3	50	35.4	25	8.8	17.7	12.5	ND	ND		
RP-2	>100	12.5	100	12.5	>100	100	>100	50	ND	ND		
RP-3	100	>100	50	12.5	100	100	25	25	ND	ND		
RP-4	8.8	2.2	50	6.3	70.7	17.7	25	3.1	ND	ND		
RP-5	4.4	0.4	25	0.8	50	8.8	12.5	3.1	ND	ND		
RP-7	100	25	100	50	>100	100	100	12.5	ND	ND		
RP-8	3.1	3.1	6.3	1.6	12.5	8.8	8.8	3.1	ND	ND		
RP-11	3.1	1.6	25	0.4	12.5	3.1	6.3	3.1	ND	ND		
RP-13	12.5	6.3	25	19.8	25	19.8	12.5	6.3	ND	ND		

ORGANISM INOCULUM =  $1 \times 10^5$  CFU/ml; LOGARITHMIC-PHASE CELLS  
 PEPTIDE CONCENTRATION = 10  $\mu$ g/ml; 37°C, AMBIENT CO<sub>2</sub>; 24 OR 48HR  
 † GEOMETRIC MEANS OF MIC<sub>100</sub> ( $n \geq 2$ ); ‡ IN VITRO TOXICITY MARKERS